

Pre-Formatted Reports: Benchmark Test Item Analysis - New Format

Data Selections

Institution(s): All School Types, All Schools
Benchmark Administration: 10/27/14, 2014-15 Mid-Semester Math III
Trend Profile: 2014-2015
Subject: Mathematics
Test Focus: Mathematics
Test Level: All Benchmark Test Levels
Test Category: District Benchmark
Grade: All Grade Levels
Enrollment: Current

Number of questions: 30
 Number of test-taking students: 623

Student Responses

Question - Type	Correct		Incorrect	Most Common Mistake		Point Value	Points Achieved / Possible	P-Value/Item Mean	Discrimination
	Rate	Value	Total Rate	Rate	Value				
1 - Multiple Choice	45%	C	55%	32%	D	1	281 / 623	0.45	0.48
2 - Multiple Choice	44%	D	56%	32%	B	1	272 / 623	0.44	0.43
3 - Multiple Choice	38%	A	62%	27%	C	1	236 / 623	0.38	0.37
4 - Multiple Choice	43%	C	57%	30%	A	1	270 / 623	0.43	0.34
5 - Multiple Choice	35%	A	65%	26%	B	1	217 / 623	0.35	0.37
6 - Multiple Choice	58%	B	42%	14%	C	1	359 / 623	0.58	0.43
7 - Multiple Choice	46%	B	54%	29%	A	1	284 / 623	0.46	0.36
8 - Multiple Choice	27%	C	73%	30%	A	1	167 / 623	0.27	0.27
9 - Multiple Choice	32%	B	68%	31%	C	1	197 / 623	0.32	0.16
10 - Multiple Choice	48%	A	52%	18%	D	1	300 / 623	0.48	0.43
11 - Multiple Choice	78%	C	22%	9%	B	1	488 / 623	0.78	0.47
12 - Multiple Choice	27%	D	73%	28%	C	1	170 / 623	0.27	0.44
13 - Multiple Choice	40%	C	60%	21%	D	1	246 / 623	0.40	0.46
14 - Multiple Choice	53%	B	47%	19%	C	1	330 / 623	0.53	0.42
15 - Multiple Choice	21%	C	79%	35%	D	1	132 / 623	0.21	0.17
16 - Multiple Choice	22%	C	78%	34%	B	1	139 / 623	0.22	0.19
17 - Multiple Choice	48%	A	52%	27%	B	1	298 / 623	0.48	0.37
18 - Multiple Choice	44%	B	56%	22%	C	1	272 / 623	0.44	0.18
19 - Multiple Choice	23%	D	77%	27%	B	1	140 / 623	0.23	0.25
20 - Multiple Choice	13%	D	87%	42%	B	1	81 / 623	0.13	0.08

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21 - Multiple Choice	28%	C	72%	28%	B	1	174 / 623	0.28	0.31
22 - Multiple Choice	18%	D	82%	43%	A	1	113 / 623	0.18	0.34
23 - Multiple Choice	34%	B	66%	31%	A	1	211 / 623	0.34	0.42
24 - Multiple Choice	14%	A	86%	42%	B	1	85 / 623	0.14	0.07
25 - Multiple Choice	34%	A	66%	23%	D	1	211 / 623	0.34	0.32
26 - Multiple Choice	60%	A	40%	13%	B	1	374 / 623	0.60	0.37
27 - Multiple Choice	24%	C	76%	35%	A	1	146 / 623	0.24	0.07
28 - Multiple Choice	29%	A	71%	31%	B	1	178 / 623	0.29	0.26
29 - Multiple Choice	26%	B	74%	35%	C	1	162 / 623	0.26	0.17
30 - Multiple Choice	32%	C	68%	22%	B	1	199 / 623	0.32	0.34
Summary	36%		64%				224 / 623		

P-value represents an item's difficulty as evaluated by dividing the total number of correct responses by the total number of students tested. P-value is calculated for true/false, multiple choice, gridded or hot spot-single response items.

Item Mean is the average score for student responses to an open response question or to a multi-part question. Item Mean is calculated for inline response, matching or hot spot-multiple selections items.

Discrimination or Item Total Score Correlation is the correlation between the question score and the overall test score and indicates the extent to which success on an item corresponds to success on the test.

Standards Alignment to NC Standards

Question	ID	Standard Description
1 - Multiple Choice	CCSS.Math.Content.HSA-APR	Arithmetic with Polynomials and Rational Expressions
2 - Multiple Choice	CCSS.Math.Content.HSA-APR	Arithmetic with Polynomials and Rational Expressions
3 - Multiple Choice	CCSS.Math.Content.HSA-APR	Arithmetic with Polynomials and Rational Expressions
4 - Multiple Choice	CCSS.Math.Content.HSF-IF	Interpreting Functions
5 - Multiple Choice	CCSS.Math.Content.HSA-APR.B.3	Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.
6 - Multiple Choice	CCSS.Math.Content.HSF-BF	Building Functions
7 - Multiple Choice	CCSS.Math.Content.HSF-IF.B	Interpret functions that arise in applications in terms of the context
8 - Multiple Choice	CCSS.Math.Content.HSF-LE	Linear, Quadratic, and Exponential Models
9 - Multiple Choice	CCSS.Math.Content.HSF-LE	Linear, Quadratic, and Exponential Models
10 - Multiple Choice	CCSS.Math.Content.HSN-CN	The Complex Number System
11 - Multiple Choice	CCSS.Math.Content.HSF-IF.B	Interpret functions that arise in applications in terms of the context

12 - Multiple Choice	CCSS.Math.Content.HSA-APR.C	Use polynomial identities to solve problems
13 - Multiple Choice	CCSS.Math.Content.HSN-RN.B	Use properties of rational and irrational numbers.
14 - Multiple Choice	CCSS.Math.Content.HSF-IF.C	Analyze functions using different representations
15 - Multiple Choice	CCSS.Math.Content.HSA-CED.A	Create equations that describe numbers or relationships
16 - Multiple Choice	CCSS.Math.Content.HSG-GPE	Expressing Geometric Properties with Equations
17 - Multiple Choice	CCSS.Math.Content.HSA-APR.D.7	Understand that rational expressions form a system analogous to the rational numbers, closed under addition, subtraction, multiplication, and division by a nonzero rational expression; add, subtract, multiply, and divide rational expressions.
18 - Multiple Choice	CCSS.Math.Content.HSF-IF.C	Analyze functions using different representations
19 - Multiple Choice	CCSS.Math.Content.HSF-IF.C	Analyze functions using different representations
20 - Multiple Choice	CCSS.Math.Content.HSF-IF	Interpreting Functions
21 - Multiple Choice	CCSS.Math.Content.HSF-IF	Interpreting Functions
22 - Multiple Choice	CCSS.Math.Content.HSA-APR	Arithmetic with Polynomials and Rational Expressions
23 - Multiple Choice	CCSS.Math.Content.HSA-APR.C	Use polynomial identities to solve problems
24 - Multiple Choice	CCSS.Math.Content.HSF-BF	Building Functions
25 - Multiple Choice	CCSS.Math.Content.HSF-LE	Linear, Quadratic, and Exponential Models
26 - Multiple Choice	CCSS.Math.Content.HSF-IF	Interpreting Functions
27 - Multiple Choice	CCSS.Math.Content.HSF-LE	Linear, Quadratic, and Exponential Models
28 - Multiple Choice	CCSS.Math.Content.HSF-IF.C	Analyze functions using different representations
29 - Multiple Choice	CCSS.Math.Content.HSF-LE	Linear, Quadratic, and Exponential Models
30 - Multiple Choice	CCSS.Math.Content.HSA-APR.B	Understand the relationship between zeros and factors of polynomials